

**REMARKS**

In the Office Action mailed February 21, 2006, claims 1-72 and 107-112 have been rejected. Upon entry of the instant amendment to the claims, claims 1, 28, 53, and 107 have been amended and claims 19, 45, and 63 have been cancelled; no new matter is deemed added by this amendment to the claims. Applicant's request for continued examination and reconsideration is respectfully requested in view of the amendments and remarks.

Applicant would like to thank Examiner Vo for courtesies extended to the undersigned representative in the telephonic interview discussing outstanding issues to the claims. In the interview, claim 1 of the present invention was discussed, particularly in view of the references cited in the outstanding Office Action.

**Claim Rejections**

**35 U.S.C. §112, 2<sup>nd</sup> paragraph:** Claims 1-72 and 107-112 were rejected as indefinite for failing to particularly point out and distinctly claim the subject matter regarded as the invention. Applicant strongly believes the claim language clearly conveys the arrangement of layers. Further, in view of the specification and the figures, the scope of the claims is clearly determinable. However, Applicant asserts that the instant claim amendments render moot the rejection under Section 112, 2<sup>nd</sup> paragraph. Removal of the rejection is, therefore, respectfully requested.

**Double patenting:** Claims 1-72 and 107-112 have been provisionally rejected on the ground of non-statutory obviousness type double patenting in view of commonly owned 10/823,512. Applicants have filed a Terminal Disclaimer concurrently herewith. Thus, removal of the rejection is requested.

**35 U.S.C. §102(b):** Claims 1-4, 8-10, 14-22, 25-28, 31-35, 39-47, 51-67, 71, and 72 have been rejected under section 102(b) as being anticipated by JP 2004-003617 (hereinafter "'617"). As noted in the Interview Summary mailed July 19, 2006, '617 is not available for consideration as 102(b) prior art. Without acquiescing to the suitability of the reference for purposes of rendering the claims anticipated, Applicant hereby submits The Declaration of Kevin E. Dove (Appendix A) under 37 C.F.R.

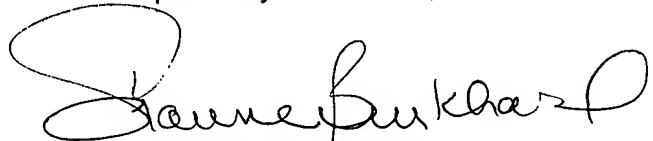
§1.131 to exclude '617 as a reference under 35 U.S.C. §102(a). Therefore, removal of this rejection is respectfully requested.

**35 U.S.C. §103(a):** Claims 5-7, 11-13, 29, 30, 36-38, 55, and 56 are rejected under section 103(a) as unpatentable over JP 2004-003617, in view of Barna et al. (5,492,336). Claims 23, 24, 48-50, 68-70, and 107-112 are rejected as unpatentable over '617 in view of WO 01/27501 (hereinafter "'501"). For the reasons set forth above for the rejection under §102(b) and in view of the Declaration submitted herewith, removal of '617 as a reference is appropriate and removal of the rejection is requested.

**35 U.S.C. §103(a):** Claims 11-13, 36-38, and 56 were rejected as unpatentable under 103(a) as obvious and unpatentable over WO 01/27501 as applied to claims 1, 28, and 53 and further in view of Gore (U.S.P.N. 3,953,566). Claims 26, 27, 51, 52, 71 and 72 were rejected under 103(a) as unpatentable over WO 01/27501 in view of Hamilton et al. (U.S.P.N. 5,486,010). Claims 4, 35, and 60 were rejected under 103(a) as unpatentable over WO 01/027501 A1. Further to the Interview Summary Applicant asserts that the claims, as amended, are patentable over the cited documents, and removal of the rejection is requested.

Applicant submits that the independent claims 1, 28, 53 and 107 are in condition for allowance. Where the respective pending dependent claims have all of the limitations of the independent claims, applicant deems these claims to be patentable for the reasons set forth for the independent claims. Removal of the rejection to the claims, and prompt and favorable reconsideration is respectfully requested. If any further action on the part of applicant is deemed necessary, the Examiner should free to contact this office.

Respectfully submitted,



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Date: July 31, 2006

## **APPENDIX A**



Customer No. 28596  
Attorney Docket No. GK/56

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Kevin Dove

Serial No.: 10/798,917

Filed: March 10, 2004

For: Low Stress to Seal Expanded PTFE  
Gasket Tape

) Art Unit: 1771

) Examiner: Hai Vo

) *I hereby certify that this correspondence is  
being deposited with the United States  
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Commissioner for Patents  
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Alexandria, VA 22313-1450

*Susan H. Dunbar*  
Susan H. Dunbar

July 31, 2006  
(date of faxing document)

DECLARATION UNDER 37 C.F.R. §1.131

Dear Sir:

I, Kevin Dove, named as inventor in the above-referenced patent application, state as follows:

1. The present invention was completed at a date prior to January 8, 2004, that is, the effective date of Japanese Patent No. JP2004003617 to Kuno et al., which was cited by the Examiner in the above-referenced patent application. The effective date corresponds to the Japanese publication date.

2. To establish the date of completion of the present invention as prior to the effective date of the reference, copies of notebook pages 20, 21, 41, 43, and 44 of notebook APN-094 are attached as Exhibit 1.

3. I state that the actual dates of Exhibit I are prior to the effective date of JP2004003617.

4. The work corresponding to Exhibit I was performed by me, or by technicians working under my direction, in the United States.

I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to

be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Full name of inventor Kevin E. Dove

Inventor's signature 

Date 7/31/06 Country of Citizenship U.S.A.

Residence 2605 Whittier Place, Wilmington, Delaware 19808, U.S.A.

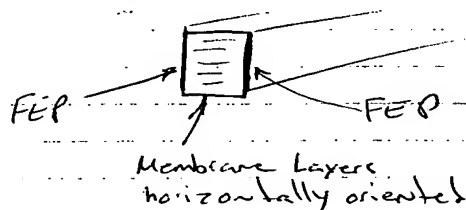
## **EXHIBIT I**

DATE 3/4/03

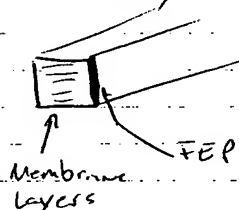
SUBJECT OF EXPT. Low Stress to Seal Series Tape Sample Development for Stress to Seal Test

Materials: 2 mil. FEP  
 Nominal 6 mm x 6 mm Series 600 Tape  
 ~2 meters long, 3 pieces

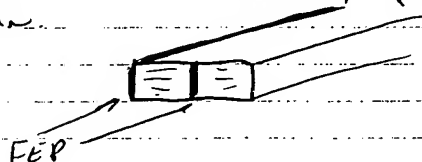
The FEP was melted to the edges of one of the tape using the hot press set at 400°C.



The FEP was melted to only one edge of <sup>each of</sup> the remaining tapes.



Two of the series tapes, the one with FEP on both edges and one with FEP on one edge, were welded together using the fixture shown on page 15. The hot air gun was set to maximum temperature (#6) and the air flow was set to #3. The tapes were manually pulled through the fixture at about 4"/min.



The third tape was welded to the previously welded together tapes using the same fixture and temperature and air flow.



Final Width = 0.7", thickness = 0.232

EXPERIMENTER

WITNESS

*[Signature]*  
 Jessica Chillas

DATE

3/4/03

DATE

3/4/03

DATE 3/4/03

SUBJECT OF EXPT.

Stress to Seal Test on Low Stress to Seal Samples  
from Page 20

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DEV7535M adhesive was applied to the low stress to seal tape. The adhesive was  $3/8"$  wide and applied down the center of the tape on one side.

A 4" diameter circle was drawn on the lower platen as a guide for forming the tape into a circular gasket. The tape was skived and overlapped as traditionally done with Series Tape.

The test gaskets would have an inner diameter of about 4" and an outer diameter of about 5.4". The gasket area was about 10.3 in<sup>2</sup>.

Three gaskets were tested to determine stress to seal.

30 psi air pressure  
Manometer level readings (time)

Gasket	Load: 5150 lbs. (500 psi)	10,300 lbs. (1000 psi)	12,875 lbs. (1250 psi)
#1	0.5" (3' 15")	0.1" (4' 0")	0.05" (24' 30")
#2	0.4" (2' 45")	0.1" (4' 15")	0.25" (20' 0")
#3	0.2" (3' 0")	0.1" (30' 0")	N/A
	Load: 15450 lbs. (1500 psi)	18,025 (1750 psi)	20,600 lbs. (2000 psi)
#1	0.3" (3' 15") 0.03" (30')	N/A	N/A
#2	0.25" (41' 03")	0.2" (31' 30")	0.25" (31' 0")
#3	0.20" (31' 16") 0.19" (31' 16") N/A	N/A	N/A

Width of gasket after test:

#1	0.746"
#2	0.758"
#3	0.722"

Bubble Test on Gasket #3

Stress = 1000 psi

Air Pressure	Bubbles (y/n)
30 psi	No
60 psi	No
90 psi	No
100 psi	No

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WITNESS

DATE 3/5/03

DATE March 5, 2003

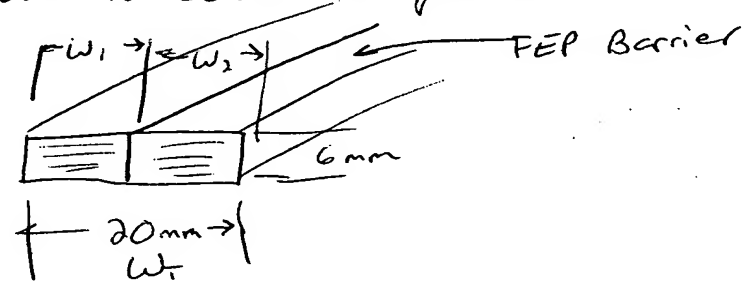


DATE 5/27/03

SUBJECT OF EXPT.

Low Stress to Seal Tape Samples to JGI for testing on Flange with 200 mm radius of curvature

Low Stress to Seal Series Tape Sample had single barrier layer made of 1 mil thick FEP. The FEP was melt bonded to an edge of a 6 mm x 20 mm Series 600 Tape using the hot press set at 375°C. Two of these tapes were welded together using the LSTS fixture with hot air gun set at max temp and air flow. The final width of the welded tapes was approximately 1.25 inches. The tape was then cut to final width of 0.787" keeping the barrier as close to center as possible.



LSTS Tape Gasket #	Sample W <sub>1</sub>	Dimensions W <sub>2</sub>	W <sub>3</sub>	Thickness
1	.373	.430	.803	.223
2	.419	.374	.793	.234
3	.351	.457	.808	.227
4	.376	.440	.816	.225

Series 600 Tape Sample Dimensions

Gasket #	W <sub>1</sub>	W <sub>2</sub>	W <sub>3</sub>	Thickness
1	N/A	N/A	.788	.253
2	N/A	N/A	.798	.225
3	N/A	N/A	.770	.247
4	N/A	N/A	.782	.239

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*[Signature]*  
Jerrisa Chollar

DATE

5/27/03

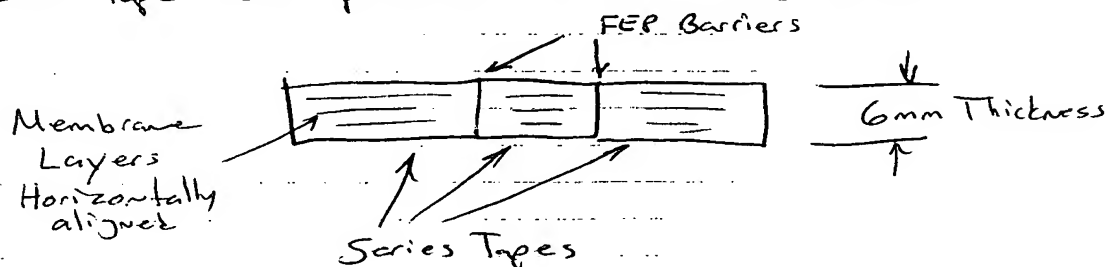
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5/27/03

## Low Stress to Seal Series Tape Prototypes

A 6 mm x 55 mm x ~3.5 meter long low stress to seal Series Tape was produced as described below.



- 1) The tape was made from three Series Tapes as shown above. The center tape had an initial nominal width of 15 mm. The two outer tapes had initial nominal widths of 30 mm.
- 2) 1 mil thick FEP was melt bonded to one edge of each of the 30 mm wide tapes using the hot press with temperature set to 375°C on the upper platen. 1 mil thick FEP was bonded to both edges of the 15 mm wide tape.
- 3) The 15 mm wide tape was welded to one of the 30 mm wide tapes using the LSTS fixture with the hot air gun set to maximum temperature and maximum air flow.
- 4) The remaining 30 mm wide tape was then welded to the previously welded 15 and 30 mm tapes. The final tape had a width of ~60 mm. The tape was trimmed to a final width of 55 mm.

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*[Signature]*  
Jenna Chillas

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5/30/03

DATE

5/30/03

DATE 6/4/03

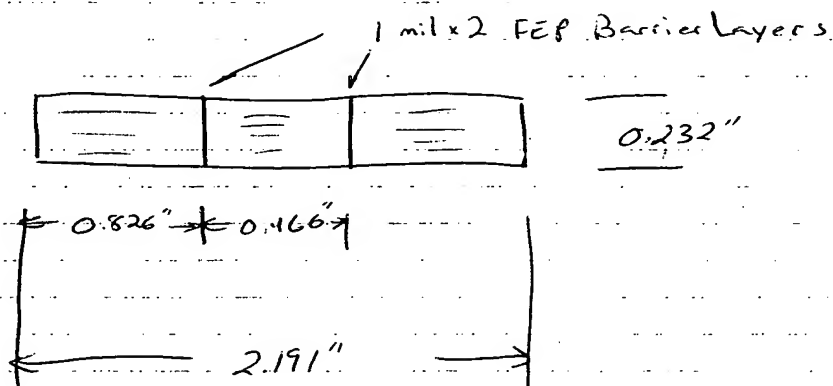
SUBJECT OF EXPT. LSTS Tape Samples to PUI for Testing

6 mm x 20 mm for Leakage Testing (see Page 4/16)

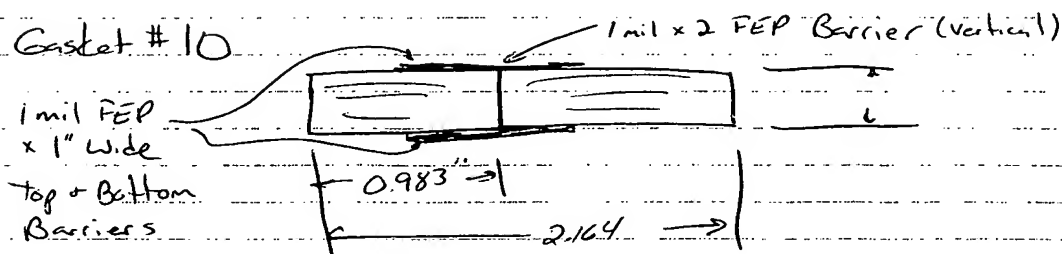
Gasket #	Barrier Type	Gasket Width	Thickness
5	Single, Vertical, 1 mil x 2 FEP, Centered	0.817"	0.224"
6	Single, Vertical, 1 mil x 2 FEP, Centered	0.803"	0.221"
7	Single, Vertical, 1 mil x 2 FEP, Centered	0.812"	0.222"
8	Vertical FEP (1 mil x 2), Top + Bottom (1 mil FEP x 1/2" W)	0.819"	0.218"

6 mm x 55 mm for testing on DNSO GLS Flange

Gasket #9



Gasket #10



Vertical Barrier was slightly off center from trimming to final width

EXPERIMENTER

DATE

WITNESS

DATE

Jenna Chellai

6/4/03  
6/4/03